



Code of Federal Regulations

HOPKINS # MAY 15 2000

10

Parts 51 to 199

Revised as of January 1, 2000

Energy

OFFICIAL FILE

I.C.C. DOCKET NO. 00-036

(Comer) Exhibit No. 10

Witness _____

Date 2/25/00 Reporter [Signature]

PART 51—ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULATORY FUNCTIONS

Sec.

- 51.1 Scope.
- 51.2 Subparts.
- 51.3 Resolution of conflict.
- 51.4 Definitions.
- 51.5 Interpretations.
- 51.6 Specific exemptions.

Subpart A—National Environmental Policy Act—Regulations Implementing Section 102(2)

- 51.10 Purpose and scope of subpart; application of regulations of Council on Environmental Quality.
- 51.11 Relationship to other subparts. [Reserved]
- 51.12 Application of subpart to ongoing environmental work.
- 51.13 Emergencies.
- 51.14 Definitions.
- 51.15 Time schedules.
- 51.16 Proprietary information.
- 51.17 Information collection requirements; OMB approval.

PRELIMINARY PROCEDURES

CLASSIFICATION OF LICENSING AND REGULATORY ACTIONS

- 51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements.
- 51.21 Criteria for and identification of licensing and regulatory actions requiring environmental assessments.
- 51.22 Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review.
- 51.23 Temporary storage of spent fuel after cessation of reactor operation—generic determination of no significant environmental impact.

DETERMINATIONS TO PREPARE ENVIRONMENTAL IMPACT STATEMENTS, ENVIRONMENTAL ASSESSMENTS OR FINDINGS OF NO SIGNIFICANT IMPACT, AND RELATED PROCEDURES

- 51.25 Determination to prepare environmental impact statement or environmental assessment; eligibility for categorical exclusion.
- 51.26 Requirement to publish notice of intent and conduct scoping process.
- 51.27 Notice of intent.

SCOPING

- 51.28 Scoping—participants.

- 51.29 Scoping—environmental impact statement.

ENVIRONMENTAL ASSESSMENT

- 51.30 Environmental assessment.
- 51.31 Determinations based on environmental assessment.

FINDING OF NO SIGNIFICANT IMPACT

- 51.32 Finding of no significant impact.
- 51.33 Draft finding of no significant impact; distribution.
- 51.34 Preparation of finding of no significant impact.
- 51.35 Requirement to publish finding of no significant impact; limitation on Commission action.

ENVIRONMENTAL REPORTS AND INFORMATION—REQUIREMENTS APPLICABLE TO APPLICANTS AND PETITIONERS FOR RULEMAKING

GENERAL

- 51.40 Consultation with NRC staff.
- 51.41 Requirement to submit environmental information.

ENVIRONMENTAL REPORTS—GENERAL REQUIREMENTS

- 51.45 Environmental report.

ENVIRONMENTAL REPORTS—PRODUCTION AND UTILIZATION FACILITIES

- 51.50 Environmental report—construction permit stage.
- 51.51 Uranium fuel cycle environmental data—Table S-3.
- 51.52 Environmental effects of transportation of fuel and waste—Table S-4.
- 51.53 Postconstruction environmental reports.
- 51.54 Environmental report—manufacturing license.
- 51.55 Environmental report—number of copies; distribution.

ENVIRONMENTAL REPORTS—MATERIALS LICENSES

- 51.60 Environmental report—materials licenses.
- 51.61 Environmental report—independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS) license.
- 51.62 Environmental report—land disposal of radioactive waste licensed under 10 CFR part 61.
- 51.66 Environmental report—number of copies; distribution.
- 51.67 Environmental information concerning geologic repositories.

ENVIRONMENTAL REPORTS—RULEMAKING

- 51.68 Environmental report—rulemaking.

51.69 Environmental report—number of copies.
ENVIRONMENTAL IMPACT STATEMENTS
GENERAL REQUIREMENTS

DRAFT ENVIRONMENTAL IMPACT STATEMENTS—GENERAL REQUIREMENTS

51.70 Draft environmental impact statement—general.

51.71 Draft environmental impact statement—contents.

51.72 Supplement to draft environmental impact statement.

51.73 Request for comments on draft environmental impact statement.

51.74 Distribution of draft environmental impact statement and supplement to draft environmental impact statement; news releases.

DRAFT ENVIRONMENTAL IMPACT STATEMENTS—PRODUCTION AND UTILIZATION FACILITIES

51.75 Draft environmental impact statement—construction permit.

51.76 Draft environmental impact statement—manufacturing license.

51.77 Distribution of draft environmental impact statement.

DRAFT ENVIRONMENTAL IMPACT STATEMENTS—MATERIALS LICENSES

51.80 Draft environmental impact statement—materials license.

51.81 Distribution of draft environmental impact statement.

DRAFT ENVIRONMENTAL IMPACT STATEMENTS—RULEMAKING

51.85 Draft environmental impact statement—rulemaking.

51.86 Distribution of draft environmental impact statement.

LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENTS—PROPOSALS FOR LEGISLATION

51.88 Proposals for legislation.

FINAL ENVIRONMENTAL IMPACT STATEMENTS—GENERAL REQUIREMENTS

51.90 Final environmental impact statement—general.

51.91 Final environmental impact statement—contents.

51.92 Supplement to final environmental impact statement.

51.93 Distribution of final environmental impact statement and supplement to final environmental impact statement; news releases.

51.94 Requirement to consider final environmental impact statement.

FINAL ENVIRONMENTAL IMPACT STATEMENTS—PRODUCTION AND UTILIZATION FACILITIES

51.95 Postconstruction environmental impact statement.

FINAL ENVIRONMENTAL IMPACT STATEMENTS—MATERIALS LICENSES

51.97 Final environmental impact statement—materials license.

§ 51.6

RESPONSIBLE OFFICIAL

51.125 Responsible official.

APPENDIX A TO SUBPART A—FORMAT FOR PRESENTATION OF MATERIAL IN ENVIRONMENTAL IMPACT STATEMENTS

APPENDIX B TO SUBPART A—ENVIRONMENTAL EFFECT OF RENEWING THE OPERATING LICENSE OF A NUCLEAR POWER PLANT

AUTHORITY: Sec. 161, 68 Stat. 946, as amended, Sec. 1701, 106 Stat. 2951, 2952, 2953, (42 U.S.C. 2201, 2297f); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842). Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 106, 83 Stat. 853-854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95-604, Title II, 92 Stat. 3083-3041; and sec. 193, Pub. L. 101-575, 104 Stat. 2835, 42 U.S.C. 2243). Sections 51.20, 51.30, 51.60, 51.61, 51.80, and 51.97 also issued under secs. 135, 141, Pub. L. 100-96 Stat. 2232, 2241, and sec. 148, Pub. L. 100-203, 101 Stat. 1330-223 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under sec. 714.73 Stat. 688, as amended by 92 Stat. 3036-3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

SOURCE: 49 FR 9381, Mar. 12, 1984, unless otherwise noted.

§ 51.1 Scope.

This part contains environmental protection regulations applicable to NRC's domestic licensing and related regulatory functions. These regulations do not apply to export licensing matters within the scope of part 110 of this chapter or to any environmental effects which NRC's domestic licensing and related regulatory functions may have upon the environment of foreign nations. Subject to these limitations, the regulations in this part implement:

(a) Section 102(2) of the National Environmental Policy Act of 1969, as amended.

§ 51.2 Subparts.

(a) The regulations in subpart A of this part implement section 102(2) of the National Environmental Policy Act of 1969, as amended.

§ 51.3 Resolution of conflict.

In any conflict between a general rule in subpart A of this part and a special rule in another subpart of this part or another part of this chapter applica-

ble to a particular type of proceeding, the special rule governs.

§ 51.4 Definitions.

As used in this part:

Act means the Atomic Energy Act of 1954 (Pub. L. 83-703, 68 Stat. 919) including any amendments thereto.

Commission means the Nuclear Regulatory Commission or its authorized representatives.

NRC means the Nuclear Regulatory Commission, the agency established by Title II of the Energy Reorganization Act of 1974, as amended.

NRC staff means any NRC officer or employee or his/her authorized representative, except a Commissioner, a member of a Commissioner's immediate staff, an Atomic Safety and Licensing Board, an Atomic Safety and Licensing Appeal Board, a presiding officer, an administrative judge, an administrative law judge, or any other officer or employee of the Commission who performs adjudicatory functions.

NRC Staff Director means:

Executive Director for Operations; Director, Office of Nuclear Reactor Regulation; Director, Office of Nuclear Material Safety and Safeguards; Director, Office of Nuclear Regulatory Research; Director, Office of Governmental and Public Affairs; and

The designee of any NRC staff director.

(49 FR 9381, Mar. 12, 1984, as amended at 51 FR 35999, Oct. 8, 1986; 52 FR 31612, Aug. 21, 1987)

§ 51.5 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 51.6 Specific exemptions.

The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and are otherwise in the public interest.

Subpart A—National Environmental Policy Act—Regulations Implementing Section 102(2)

§ 51.10 Purpose and scope of subpart; application of regulations of Council on Environmental Quality.

(a) The National Environmental Policy Act of 1969, as amended (NEPA) directs that, to the fullest extent possible: (1) The policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in NEPA, and (2) all agencies of the Federal Government shall comply with the procedures in section 102(2) of NEPA except where compliance would be inconsistent with other statutory requirements. The regulations in this subpart implement section 102(2) of NEPA in a manner which is consistent with the NRC's domestic licensing and related regulatory authority under the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and the Uranium Mill Tailings Radiation Control Act of 1978, and which reflects the Commission's announced policy to take account of the regulations of the Council on Environmental Quality published November 29, 1978 (43 FR 55978-56007) voluntarily, subject to certain conditions. This subpart does not apply to export licensing matters within the scope of part 110 of this chapter nor does it apply to any environmental effects which NRC's domestic licensing and related regulatory functions may have upon the environment of foreign nations.

(b) The Commission recognizes a continuing obligation to conduct its domestic licensing and related regulatory functions in a manner which is both receptive to environmental concerns and consistent with the Commission's responsibility as an independent regulatory agency for protecting the radiological health and safety of the public. Accordingly, the Commission will:

(1) Examine any future interpretation or change to the Council's NEPA regulations;

(2) Follow the provisions of 40 CFR 1501.5 and 1501.6 relating to lead agencies and cooperating agencies, except that the Commission reserves the right

to prepare an independent environmental impact statement whenever the NRC has regulatory jurisdiction over an activity even though the NRC has not been designated as lead agency for preparation of the statement; and

(3) Reserve the right to make a final decision on any matter within the NRC's regulatory authority even though another agency has made a predecisional referral of an NRC action to the Council under the procedures of 40 CFR part 1504.

(c) The regulations in this subpart also address the limitations imposed on NRC's authority and responsibility under the National Environmental Policy Act of 1969, as amended, by the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, 86 Stat. 816 et seq. (33 U.S.C. 1261 et seq.). In accordance with section 511(c)(2) of the Federal Water Pollution Control Act (66 Stat. 893, 33 U.S.C. 1371(c)(2)) the NRC recognizes that responsibility for Federal regulation of nonradiological pollutant discharges into receiving waters rests by statute with the Environmental Protection Agency.

(d) Commission actions initiating or relating to administrative or judicial civil or criminal enforcement actions or proceedings are not subject to Section 102(2) of NEPA. These actions include issuance of notices of violation, orders, and denials of requests for action pursuant to subpart B of part 2 of this chapter; matters covered by part 15 and part 160 of this chapter; and issuance of confirmatory action letters, bulletins, generic letters, notices

Nuclear Regulatory Commission

§ 51.14

of deviation, and notices of non-conformance.

(49 FR 9381, Mar. 12, 1984, as amended at 54 FR 45578, Oct. 26, 1989; 61 FR 43408, Aug. 22, 1996)

§ 51.11 Relationship to other subparts. [Reserved]

§ 51.12 Application of subpart to ongoing environmental work.

(a) Except as otherwise provided in this section, the regulations in this subpart shall apply to the fullest extent practicable to NRC's ongoing environmental work.

(b) No environmental report or any supplement to an environmental report filed with the NRC and no environmental assessment, environmental impact statement or finding of no significant impact or any supplement to any of the foregoing issued by the NRC before June 7, 1984, need be redone and no notice of intent to prepare an environmental impact statement or notice of availability of these environmental documents need be republished solely by reason of the promulgation on March 12, 1984, of this revision of part 51.

(49 FR 9381, Mar. 12, 1984, as amended at 49 FR 24513, June 14, 1984)

§ 51.13 Emergencies.

Whenever emergency circumstances make it necessary and whenever, in other situations, the health and safety of the public may be adversely affected if mitigative or remedial actions are delayed, the Commission may take an action with significant environmental impact without observing the provisions of these regulations. In taking an action covered by this section, the Commission will consult with the Council as soon as feasible concerning appropriate alternative NEPA arrangements.

§ 51.14 Definitions.

(a) As used in this subpart:

Categorical Exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which the Commission has found to have no such effect in accordance with procedures set out in § 51.22, and

for which, therefore, neither an environmental assessment nor an environmental impact statement is required.

Cooperating Agency means any Federal agency other than the NRC which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. By agreement with the Commission, a State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may become a cooperating agency.

Council means the Council on Environmental Quality (CEQ) established by Title II of NEPA.

DOE means the U.S. Department of Energy or its duly authorized representatives.

Environmental Assessment means a concise public document for which the Commission is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid the Commission's compliance with NEPA when no environmental impact statement is necessary.

(3) Facilitate preparation of an environmental impact statement when one is necessary.

Environmental document includes an environmental assessment, an environmental impact statement, a finding of no significant impact, an environmental report and any supplements to or comments upon those documents, and a notice of intent.

Environmental Impact Statement means a detailed written statement as required by section 102(2)(C) of NEPA.

Environmental report means a document submitted to the Commission by an applicant for a permit, license, or other form of permission, or an amendment to or renewal of a permit, license or other form of permission, in order to aid the Commission in complying with section 102(2) of NEPA.

Finding of No Significant Impact means a concise public document for

which the Commission is responsible that briefly states the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and for which therefore an environmental impact statement will not be prepared.

NEPA means the National Environmental Policy Act of 1969, as amended (Pub. L. 91-190, 83 Stat. 862, 866, as amended by Pub. L. 94-83, 89 Stat. 424, 42 U.S.C. 4321, et seq.).

Notice of intent means a notice that an environmental impact statement will be prepared and considered.

Uranium enrichment facility means:

(1) Any facility used for separating the isotopes for uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

(b) The definitions in 40 CFR 1508.3, 1508.7, 1508.8, 1508.14, 1508.15, 1508.16, 1508.17, 1508.18, 1508.20, 1508.23, 1508.25, 1508.26, and 1508.27, will also be used in implementing section 102(2) of NEPA.

[49 FR 9381, Mar. 12, 1984, as amended at 57 FR 18391, Apr. 30, 1992]

§51.16 Time schedules.

Consistent with the purposes of NEPA, the Administrative Procedure Act, the Commission's rules of practice in part 2 of this chapter, §§51.100 and 51.101, and with other essential considerations of national policy:

(a) The appropriate NRC staff director may, and upon the request of an applicant for a proposed action or a petitioner for rulemaking shall, establish a time schedule for all or any constituent part of the NRC staff NEPA process. To the maximum extent practicable, the NRC staff will conduct its NEPA review in accordance with any time schedule established under this section.

(b) Pursuant to subpart G of part 2 of this chapter, the presiding officer, the Atomic Safety and Licensing Appeal

Board or the Commissioners acting as a collegial body may establish a time schedule for all or any part of an advisory or rulemaking proceeding to the extent that each has jurisdiction.

§51.16 Proprietary information.

(a) Proprietary information, such as trade secrets or privileged or confidential commercial or financial information, will be treated in accordance with the procedures provided in §2.790, "Public Inspections, Exemptions, Requests for Withholding," of part 2, "Rules of Practice," of this chapter.

(b) Any proprietary information which a person seeks to have withheld from public disclosure shall be submitted in accordance with §2.790 of this chapter. When submitted, the proprietary information should be clearly identified and accompanied by a request, containing detailed reasons and justifications, that the proprietary information be withheld from public disclosure. A non-proprietary summary describing the general content of the proprietary information should also be provided.

§51.17 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act (44 U.S.C. 3501 et seq.). The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. OMB has approved the information collection requirements contained in this part under control number 3150-0021.

(b) The approved information collection requirements in this part appear in §§51.16, 51.41, 51.45, 51.50, 51.51, 51.52, 51.53, 51.54, 51.55, 51.60, 51.61, 51.62, 51.66, 51.68, and 51.69.

[49 FR 24513, June 14, 1984, as amended at 52 FR 52188, Oct. 6, 1997]

PRELIMINARY PROCEDURES CLASSIFICATION OF LICENSING AND REGULATORY ACTIONS

§51.20 Criteria for and identification of licensing and regulatory actions requiring environmental impact statements.

(a) Licensing and regulatory actions requiring an environmental impact statement shall meet at least one of the following criteria:

(1) The proposed action is a major Federal action significantly affecting the quality of the human environment.

(2) The proposed action involves a matter which the Commission, in the exercise of its discretion, has determined should be covered by an environmental impact statement.

(b) The following types of actions require an environmental impact statement or a supplement to an environmental impact statement:

(1) Issuance of a limited work authorization or a permit to construct a nuclear power reactor, testing facility or fuel reprocessing plant pursuant to part 50 of this chapter.

(2) Issuance or renewal of a full power or design capacity license to operate a nuclear power reactor, testing facility, or fuel reprocessing plant pursuant to part 50 of this chapter.

(3) Issuance of a permit to construct or a design capacity license to operate or renewal of a design capacity license to operate an isotopic enrichment plant pursuant to part 50 of this chapter.

(4) Conversion of a provisional operating license for a nuclear power reactor, testing facility or fuel reprocessing plant to a full term or design capacity license pursuant to part 50 of this chapter if a final environmental impact statement covering full term or design capacity operation has not been previously prepared.

(5) [Reserved]

(6) Issuance of a license to manufacture pursuant to Appendix M of part 52 of this chapter.

(7) Issuance of a license to possess and use special nuclear material for processing and fuel fabrication, scrap recovery, or conversion of uranium hexafluoride pursuant to part 70 of this chapter.

(8) Issuance of a license to possess and use source material for uranium milling or production of uranium hexafluoride pursuant to part 40 of this chapter.

(9) Issuance of a license pursuant to part 72 of this chapter for the storage of spent fuel in an independent spent fuel storage installation (ISFSI) at a site not occupied by a nuclear power reactor, or for the storage of spent fuel or high-level radioactive waste in a monitored retrievable storage installation (MRS).

(10) Issuance of a license for a uranium enrichment facility.

(11) Issuance or renewal of a license authorizing receipt and disposal of radioactive waste from other persons pursuant to part 61 of this chapter.

(12) Issuance of a license amendment pursuant to part 61 of this chapter authorizing (i) closure of a land disposal site, (ii) transfer of the license to the disposal site owner for the purpose of institutional control, or (iii) termination of the license at the end of the institutional control period.

(13) Issuance of a construction authorization and license pursuant to part 60 of this chapter.

(14) Any other action which the Commission determines is a major Commission action significantly affecting the quality of the human environment. As provided in §51.20(b), the Commission may, in special circumstances, prepare an environmental impact statement on an action covered by a categorical exclusion.

[49 FR 9381, Mar. 12, 1984, as amended at 53 FR 31861, Aug. 19, 1988; 53 FR 24052, June 27, 1988; 54 FR 15388, Apr. 18, 1989; 54 FR 27870, July 3, 1989; 57 FR 18392, Apr. 30, 1992]

§51.21 Criteria for and identification of licensing and regulatory actions requiring environmental assessments.

All licensing and regulatory actions subject to this subpart require an environmental assessment except those identified in §51.20(b) as requiring an environmental impact statement, those identified in §51.20(c) as categorical exclusions, and those identified in §51.20(d) as other actions not requiring environmental review. As provided in

§ 51.22(b), the Commission may, in special circumstances, prepare an environmental assessment on an action covered by a categorical exclusion.

[54 FR 27870, July 3, 1989]

§ 51.22 Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review.

(a) Licensing and regulatory actions eligible for categorical exclusion shall meet the following criterion: The proposed action belongs to a category of actions which the Commission, by rule or regulation, has declared to be a categorical exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment.

(b) Except in special circumstances, as determined by the Commission upon its own initiative or upon request of any interested person, an environmental assessment or an environmental impact statement is not required for any action within a category of actions included in the list of categorical exclusions set out in paragraph (c) of this section. Special circumstances include the circumstance where the proposed action involves unresolved conflicts concerning alternative uses of available resources within the meaning of section 102(2)(B) of NEPA.

(c) The following categories of actions are categorical exclusions:

(1) Amendments to parts 0, 1, 2, 4, 7, 8, 9, 10, 11, 14, 19, 21, 25, 55, 75, 95, 110, 140, 150, 170, or 171 of this chapter, and actions on petitions for rulemaking relating to these amendments.

(2) Amendments to the regulations in this chapter which are corrective or of a minor or nonpolicy nature and do not substantially modify existing regulations, and actions on petitions for rulemaking relating to these amendments.

(3) Amendments to parts 20, 30, 31, 32, 33, 34, 35, 38, 40, 50, 51, 54, 60, 61, 70, 71, 72, 73, 74, 81 and 100 of this chapter which relate to—

(i) Procedures for filing and reviewing applications for licenses or construction permits or other forms of permission or for amendments to or re-

newals of licenses or construction permits or other forms of permission;

(ii) Recordkeeping requirements; and

(iii) Reporting requirements; and

(iv) Actions on petitions for rulemaking relating to these amendments.

(4) Entrance into or amendment, suspension, or termination of all or part of an agreement with a State pursuant to section 274 of the Atomic Energy Act of 1954, as amended, providing for assumption by the State and discontinuance by the Commission of certain regulatory authority of the Commission.

(5) Procurement of general equipment and supplies.

(6) Procurement of technical assistance, confirmatory research provided that the confirmatory research does not involve any significant construction impacts, and personal services relating to the safe operation and protection of commercial reactors, other facilities, and materials subject to NRC licensing and regulation.

(7) Personnel actions.

(8) Issuance, amendment, or renewal of operators' licenses pursuant to part 55 of this chapter.

(9) Issuance of an amendment to a permit or license for a reactor pursuant to part 50 of this chapter which changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in part 20 of this chapter, or which changes an inspection or a surveillance requirement, provided that (i) the amendment involves no significant hazards consideration, (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and (iii) there is no significant increase in individual or cumulative occupational radiation exposure.

(10) Issuance of an amendment to a permit or license pursuant to parts 30, 31, 32, 33, 34, 35, 36, 39, 40, 50, 60, 61, 70 or part 72 of this chapter which (i) changes surety, insurance and/or indemnity requirements, or (ii) changes recordkeeping, reporting, or administrative procedures or requirements.

(11) Issuance of amendments to licenses for fuel cycle plants and radioactive waste disposal sites and amendments to materials licenses identified

in § 51.60(b)(1) which are administrative, organizational, or procedural in nature, or which result in a change in process operations or equipment, provided that (i) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, (ii) there is no significant increase in individual or cumulative occupational radiation exposure, (iii) there is no significant construction impact, and (iv) there is no significant increase in the potential for or consequences from radiological accidents.

(12) Issuance of an amendment to a license pursuant to parts 50, 60, 61, 70, 72 or 75 of this chapter relating solely to safeguards matters (i.e., protection against sabotage or loss or diversion of special nuclear material) or issuance of an approval of a safeguards plan submitted pursuant to parts 50, 70, 72, and 73 of this chapter, provided that the amendment or approval does not involve any significant construction impacts. These amendments and approvals are confined to (i) organizational and procedural matters, (ii) modifications to systems used for security and/or materials accountability, (iii) administrative changes, and (iv) review and approval of transportation routes pursuant to 10 CFR 73.37.

(13) Approval of package designs for packages to be used for the transportation of licensed materials.

(14) Issuance, amendment, or renewal of materials licenses issued pursuant to 10 CFR parts 30, 31, 32, 33, 34, 35, 36, 39, 40 or part 70 authorizing the following types of activities:

(i) Distribution of radioactive material and devices or products containing radioactive material to general licensees and to persons exempt from licensing.

(ii) Distribution of radiopharmaceuticals, generators, reagent kits and/or sealed sources to persons licensed pursuant to 10 CFR 35.18.

(iii) Nuclear pharmacies.

(iv) Medical and veterinary.

(v) Use of radioactive materials for research and development and for educational purposes.

(vi) Industrial radiography.

(vii) Irradiators.

(viii) Use of sealed sources and use of gauging devices, analytical instruments and other devices containing sealed sources.

(ix) Use of uranium as shielding material in containers or devices.

(x) Possession of radioactive material incident to performing services such as installation, maintenance, leak tests and calibration.

(xi) Use of sealed sources and/or radioactive tracers in well-logging procedures.

(xii) Acceptance of packaged radioactive wastes from others for transfer to licensed land burial facilities provided the interim storage period for any package does not exceed 180 days and the total possession limit for all packages held in interim storage at the same time does not exceed 50 curies.

(xiii) Manufacturing or processing of source, byproduct, or special nuclear materials for distribution to other licensees, except processing of source material for extraction of rare earth and other metals.

(xiv) Nuclear laundries.

(xv) Possession, manufacturing, processing, shipment, testing, or other use of depleted uranium military munitions.

(xvi) Any use of source, byproduct, or special nuclear material not listed above which involves quantities and forms of source, byproduct, or special nuclear material similar to those listed in paragraphs (c)(14) (i) through (xv) of this section (Category 14).

(15) Issuance, amendment or renewal of licenses for import of nuclear facilities and materials pursuant to part 110 of this chapter, except for import of spent power reactor fuel.

(16) Issuance or amendment of guides for the implementation of regulations in this chapter, and issuance or amendment of other informational and procedural documents that do not impose any legal requirements.

(17) Issuance of an amendment to a permit or license pursuant to parts 30, 40, 50 or part 70 of this chapter which deletes any limiting condition of operation or monitoring requirement based on or applicable to any matter subject to the provisions of the Federal Water Pollution Control Act.

(18) Issuance of amendments or orders authorizing licensees of production or utilization facilities to resume operation, provided the basis for the authorization rests solely on a determination or redetermination by the Commission that applicable emergency planning requirements are met.

(19) Issuance, amendment, modification, or renewal of a certificate of compliance of gaseous diffusion enrichment facilities pursuant to 10 CFR part 76.

(20) Decommissioning of sites where licensed operations have been limited to the use of—

(i) Small quantities of short-lived radioactive materials; or

(ii) Radioactive materials in sealed sources, provided there is no evidence of leakage of radioactive material from these sealed sources.

(21) Approvals of direct or indirect transfers of any license issued by NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license.

(d) In accordance with section 121 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10141), the promulgation of technical requirements and criteria that the Commission will apply in approving or disapproving applications under part 60 of this chapter shall not require an environmental impact statement, an environmental assessment, or any environmental review under subparagraph (E) or (F) of section 102(2) of NEPA.

[49 FR 9381, Mar. 12, 1984, as amended at 51 FR 9766, Mar. 21, 1986; 51 FR 38231, Sept. 18, 1986; 52 FR 8241, Mar. 17, 1987; 54 FR 27870, July 3, 1989; 58 FR 7737, Feb. 9, 1993; 59 FR 48956, Sept. 23, 1994; 60 FR 22491, May 8, 1995; 61 FR 9902, Mar. 12, 1996; 62 FR 39091, July 21, 1997; 63 FR 66735, Dec. 3, 1998]

§ 51.23 Temporary storage of spent fuel after cessation of reactor operation—generic determination of no significant environmental impact.

(a) The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage

basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

(b) Accordingly, as provided in §§ 51.30(b), 51.53, 51.61, 51.80(b), 51.95 and 51.97(a), and within the scope of the generic determination in paragraph (a) of this section, no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license or amendment or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear reactor or in connection with the issuance of an initial license for storage of spent fuel at an ISFSI, or any amendment thereto.

(c) This section does not alter any requirements to consider the environmental impacts of spent fuel storage during the term of a reactor operating license or a license for an ISFSI in a licensing proceeding.

[49 FR 34694, Aug. 31, 1984, as amended at 51 FR 38474, Sept. 18, 1986]

DETERMINATIONS TO PREPARE ENVIRONMENTAL IMPACT STATEMENTS, ENVIRONMENTAL ASSESSMENTS OR FINDINGS OF NO SIGNIFICANT IMPACT, AND RELATED PROCEDURES

§ 51.25 Determination to prepare environmental impact statement or environmental assessment; eligibility for categorical exclusion.

Before taking a proposed action subject to the provisions of this subpart, the appropriate NRC staff director will determine on the basis of the criteria

Nuclear Regulatory Commission

and classifications of types of actions in §§ 51.20, 51.21 and 51.22 of this subpart whether the proposed action is of the type listed in § 51.22(c) as a categorical exclusion or whether an environmental impact statement or an environmental assessment should be prepared. An environmental assessment is not necessary if it is determined that an environmental impact statement will be prepared.

§ 51.26 Requirement to publish notice of intent and conduct scoping process.

(a) Whenever the appropriate NRC staff director determines that an environmental impact statement will be prepared by NRC in connection with a proposed action, a notice of intent will be prepared as provided in § 51.27, and will be published in the FEDERAL REGISTER as provided in § 51.116, and an appropriate scoping process (see §§ 51.27, 51.28, and 51.29) will be conducted.

(b) The scoping process may include a public scoping meeting.

(c) Upon receipt of an application and accompanying environmental impact statement under § 60.22 of this chapter (pertaining to geologic repositories for high-level radioactive waste), the appropriate NRC staff director will include in the notice of docketing required to be published by § 2.101(f)(8) of this chapter a statement of Commission intention to adopt the environmental impact statement to the extent practicable. However, if the appropriate NRC staff director determines, at the time of such publication or at any time thereafter, that NRC should prepare a supplemental environmental impact statement in connection with the Commission's action on the license application, the procedures set out in paragraph (a) of this section shall be followed.

[49 FR 9381, Mar. 12, 1984, as amended at 54 FR 27870, July 3, 1989]

§ 51.27 Notice of intent.

(a) The notice of intent required by § 51.26 shall:

(1) State that an environmental impact statement will be prepared;

(2) Describe the proposed action and, to the extent sufficient information is available, possible alternatives;

(3) State whether the applicant or petitioner for rulemaking has filed an environmental report, and, if so, where copies are available for public inspection;

(4) Describe the proposed scoping process, including the role of participants, whether written comments will be accepted, the last date for submitting comments and where comments should be sent, whether a public scoping meeting will be held, the time and place of any scoping meeting or when the time and place of the meeting will be announced; and

(5) State the name, address and telephone number of an individual in NRC who can provide information about the proposed action, the scoping process, and the environmental impact statement.

SCOPING

§ 51.28 Scoping—participants.

(a) The appropriate NRC staff director shall invite the following persons to participate in the scoping process:

(1) The applicant or the petitioner for rulemaking;

(2) Any person who has petitioned for leave to intervene in the proceeding or who has been admitted as a party to the proceeding;

(3) Any other Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved or which is authorized to develop and enforce relevant environmental standards;

(4) Affected State and local agencies, including those authorized to develop and enforce relevant environmental standards;

(5) Any affected Indian tribe; and

(6) Any person who has requested an opportunity to participate in the scoping process.

(b) The appropriate NRC staff director may also invite any other appropriate person to participate in the scoping process.

(c) Participation in the scoping process for an environmental impact statement does not entitle the participant to become a party to the proceeding to which the environmental impact statement relates. Participation in an adjudicatory proceeding is governed by the

procedures in 10 CFR 2.714 and 2.715. Participation in a rulemaking proceeding in which the Commission has decided to have a hearing is governed by the provisions in the notice of hearing.

§ 51.29 Scoping—environmental impact statement.

(a) The scoping process for an environmental impact statement shall begin as soon as practicable after publication of the notice of intent as provided in § 51.116, and shall be used to:

(1) Define the proposed action which is to be the subject of the statement. The provisions of 40 CFR 1502.4 will be used for this purpose.

(2) Determine the scope of the statement and identify the significant issues to be analyzed in depth.

(3) Identify and eliminate from detailed study issues which are peripheral or are not significant or which have been covered by prior environmental review. Discussion of these issues in the statement will be limited to a brief presentation of why they are peripheral or will not have a significant effect on the quality of the human environment or a reference to their coverage elsewhere.

(4) Identify any environmental assessments and other environmental impact statements which are being or will be prepared that are related to but are not part of the scope of the statement under consideration.

(5) Identify other environmental review and consultation requirements related to the proposed action so that other required analyses and studies may be prepared concurrently and integrated with the environmental impact statement.

(6) Indicate the relationship between the timing of the preparation of environmental analyses and the Commission's tentative planning and decision-making schedule.

(7) Identify any cooperating agencies, and as appropriate, allocate assignments for preparation and schedules for completion of the statement to the NRC and any cooperating agencies.

(8) Describe the means by which the environmental impact statement will be prepared, including any contractor assistance to be used.

(b) At the conclusion of the scoping process, the appropriate NRC staff director will prepare a concise summary of the determinations and conclusions reached, including the significant issues identified, and will send a copy of the summary to each participant in the scoping process.

(c) At any time prior to issuance of the draft environmental impact statement, the appropriate NRC staff director may revise the determinations made under paragraph (b) of this section, as appropriate, if substantial changes are made in the proposed action, or if significant new circumstances or information arise which bear on the proposed action or its impacts.

ENVIRONMENTAL ASSESSMENT

§ 51.30 Environmental assessment.

(a) An environmental assessment shall identify the proposed action and include:

(1) A brief discussion of:

(i) The need for the proposed action;

(ii) Alternatives as required by section 102(2)(E) of NEPA;

(iii) The environmental impacts of the proposed action and alternatives as appropriate; and

(2) A list of agencies and persons consulted, and identification of sources used.

(b) Unless otherwise determined by the Commission, an environmental assessment will not include discussion of any aspect of the storage of spent fuel within the scope of the generic determination in § 51.23(a) and in accordance with the provisions of § 51.23(b).

(c) An environmental assessment for a proposed action regarding a monitored retrievable storage installation (MRS) will not address the need for the MRS or any alternative to the design criteria for an MRS set forth in section 141(b)(1) of the Nuclear Waste Policy Act of 1982 (96 Stat. 2242, 42 U.S.C. 10161(b)(1)).

[49 FR 9381, Mar. 12, 1984, as amended at 49 FR 34694, Aug. 31, 1984; 53 FR 31681, Aug. 19, 1988]

§ 51.31 Determinations based on environmental assessment.

Upon completion of an environmental assessment, the appropriate NRC staff director will determine whether to prepare an environmental impact statement or a finding of no significant impact on the proposed action. As provided in § 51.33, a determination to prepare a draft finding of no significant impact may be made.

FINDING OF NO SIGNIFICANT IMPACT

§ 51.32 Finding of no significant impact.

(a) A finding of no significant impact will:

(1) Identify the proposed action;

(2) State that the Commission has determined not to prepare an environmental impact statement for the proposed action;

(3) Briefly present the reasons why the proposed action will not have a significant effect on the quality of the human environment;

(4) Include the environmental assessment or a summary of the environmental assessment. If the assessment is included, the finding need not repeat any of the discussion in the assessment, but may incorporate it by reference;

(5) Note any other related environmental documents; and

(6) State that the finding and any related environmental documents are available for public inspection and where the documents may be inspected.

§ 51.33 Draft finding of no significant impact; distribution.

(a) As provided in paragraph (b) of this section, the appropriate NRC staff director may make a determination to prepare and issue a draft finding of no significant impact for public review and comment before making a final determination whether to prepare an environmental impact statement or a final finding of no significant impact on the proposed action.

(b) Circumstances in which a draft finding of no significant impact may be prepared will ordinarily include the following:

(1) A finding of no significant impact appears warranted for the proposed action but the proposed action is (1)

closely similar to one which normally requires the preparation of an environmental impact statement, or (ii) without precedent; and

(2) The appropriate NRC staff director determines that preparation of a draft finding of no significant impact will further the purposes of NEPA.

(c) A draft finding of no significant impact will (1) be marked "Draft"; (2) contain the information specified in § 51.32; (3) be accompanied by or include a request for comments on the proposed action and on the draft finding within thirty (30) days, or such longer period as may be specified in the notice of the draft finding; and (4) be published in the Federal REGISTER as required by §§ 51.35 and 51.119.

(d) A draft finding will be distributed as provided in § 51.74(a). Additional copies will be made available in accordance with § 51.123.

(e) When a draft finding of no significant impact is issued for a proposed action, a final determination to prepare an environmental impact statement or a final finding of no significant impact for that action shall not be made until the last day of the public comment period has expired.

§ 51.34 Preparation of finding of no significant impact.

(a) Except as provided in paragraph (b) of this section, the finding of no significant impact will be prepared by the NRC staff director authorized to take the action.

(b) When a hearing is held on the proposed action under the regulations in subpart G of part 2 of this chapter or when the action can only be taken by the Commissioners acting as a collegial body, the appropriate NRC staff director will prepare a proposed finding of no significant impact which may be subject to modification as a result of review and decision as appropriate to the nature and scope of the proceeding. In such cases, the presiding officer, the Atomic Safety and Licensing Appeal Board, or the Commission acting as a collegial body, as appropriate, will issue the final finding of no significant impact.

§ 51.35 Requirement to publish finding of no significant impact; limitation on Commission action.

(a) Whenever the Commission makes a draft or final finding of no significant impact on a proposed action, the finding will be published in the *FEDERAL REGISTER* as provided in § 51.119.

(b) Except as provided in § 51.13, the Commission shall not take the proposed action until after the final finding has been published in the *FEDERAL REGISTER*.

ENVIRONMENTAL REPORTS AND INFORMATION—REQUIREMENTS APPLICABLE TO APPLICANTS AND PETITIONERS FOR RULEMAKING

GENERAL

§ 51.40 Consultation with NRC staff.

(a) A prospective applicant or petitioner for rulemaking is encouraged to confer with NRC staff as early as possible in its planning process before submitting environmental information or filing an environmental report.

(b) Requests for guidance or information on environmental matters may include inquiries relating to:

(1) Applicable NRC rules and regulations;

(2) Format, content and procedures for filing environmental reports and other environmental information, including the type and quantity of environmental information likely to be needed to address issues and concerns identified in the scoping process described in § 51.29 in a manner appropriate to their relative significance;

(3) Availability of relevant environmental studies and environmental information;

(4) Need for, appropriate level and scope of any environmental studies or information which the Commission may require to be submitted in connection with an application or petition for rulemaking;

(5) Public meetings with NRC staff.

(c) Questions concerning environmental matters should be addressed to the following NRC staff offices as appropriate:

(1) *Utilization facilities*: Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission.

Washington, DC 20555, Telephone: (301) 415-1270.

(2) *Production facilities*: Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 415-7800.

(3) *Materials licenses*: Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 415-7800.

(4) *Rulemaking*: Director, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 415-6641.

(5) *General Environmental Matters*: Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 415-1700.

[49 FR 9381, Mar. 12, 1984, as amended at 53 FR 13399, Apr. 25, 1988; 60 FR 24552, May 9, 1995]

§ 51.41 Requirement to submit environmental information.

The Commission may require an applicant for a permit, license, or other form of permission, or amendment to or renewal of a permit, license or other form of permission, or a petitioner for rulemaking to submit such information to the Commission as may be useful in aiding the Commission in complying with section 102(2) of NEPA. The Commission will independently evaluate and be responsible for the reliability of any information which it uses.

ENVIRONMENTAL REPORTS—GENERAL REQUIREMENTS

§ 51.45 Environmental report.

(a) *General*. As required by §§ 51.50, 51.53, 51.54, 51.60, 51.61, 51.62 or § 51.68, as appropriate, each applicant or petitioner for rulemaking shall submit with its application or petition for rulemaking one signed original of a separate document entitled "Applicant's" or "Petitioner's Environmental Report," as appropriate, and the number of copies specified in §§ 51.55, 51.68 or § 51.69. An applicant or petitioner for rulemaking may submit a supplement

to an environmental report at any time.

(b) *Environmental considerations*. The environmental report shall contain a description of the proposed action, a statement of its purposes, a description of the environment affected, and discuss the following considerations:

(1) The impact of the proposed action on the environment. Impacts shall be discussed in proportion to their significance;

(2) Any adverse environmental effects which cannot be avoided should the proposal be implemented;

(3) Alternatives to the proposed action. The discussion of alternatives shall be sufficiently complete to aid the Commission in developing and exploring, pursuant to section 102(2)(E) of NEPA, "appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." To the extent practicable, the environmental impacts of the proposal and the alternatives should be presented in comparative form;

(4) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and

(5) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

(c) *Analysis*. The environmental report shall include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects. Except for environmental reports prepared at the license renewal stage pursuant to § 51.53(c), the analysis in the environmental report should also include consideration of the economic, technical, and other benefits and costs of the proposed action and of alternatives. Environmental reports prepared at the license renewal stage pursuant to § 51.53(c) need not discuss the economic or technical benefits and costs of either

the proposed action or alternatives except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, environmental reports prepared pursuant to § 51.53(c) need not discuss other issues not related to the environmental effects of the proposed action and alternatives. The analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, those considerations or factors shall be discussed in qualitative terms. The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis.

(d) *Status of compliance*. The environmental report shall list all Federal permits, licenses, approvals and other entitlements which must be obtained in connection with the proposed action and shall describe the status of compliance with these requirements. The environmental report shall also include a discussion of the status of compliance with applicable environmental quality standards and requirements including, but not limited to, applicable zoning and land-use regulations, and thermal and other water pollution limitations or requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection. The discussion of alternatives in the report shall include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements.

(e) *Adverse information*. The information submitted pursuant to paragraphs (b) through (d) of this section should not be confined to information supporting the proposed action but should also include adverse information.

[49 FR 9381, Mar. 12, 1984, as amended at 61 FR 28486, June 5, 1996; 61 FR 66542, Dec. 18, 1996]

\$51.50

ENVIRONMENTAL REPORTS—PRODUCTION
AND UTILIZATION FACILITIES

\$51.50 Environmental report—construction permit stage.

Each applicant for a permit to construct a production or utilization facility covered by §51.20 shall submit with its application the number of copies, as specified in §51.55, of a separate document, entitled "Applicant's Environmental Report—Construction Permit Stage," which shall contain the information specified in §§51.45, 51.51 and 51.52. Each environmental report shall identify procedures for reporting and keeping records of environmental data, and any conditions and monitoring requirements for protecting the non-aquatic environment, proposed for possible inclusion in the license as environmental conditions in accordance with §50.36b of this chapter.

10 CFR Ch. I (1-1-00 Edition)

\$51.51 Uranium fuel cycle environmental data—Table S-3.

(a) Every environmental report prepared for the construction permit stage of a light-water-cooled nuclear power reactor, and submitted on or after September 4, 1979, shall take Table S-3, Table of Uranium Fuel Cycle Environmental Data, as the basis for evaluating the contribution of the environmental effects of uranium mining and milling, the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and management of low level wastes and high level wastes related to uranium fuel cycle activities to the environmental costs of licensing the nuclear power reactor. Table S-3 shall be included in the environmental report and may be supplemented by a discussion of the environmental significance of the data set forth in the table as weighed in the analysis for the proposed facility.

(b) Table S-3.

TABLE S-3—TABLE OF URANIUM FUEL CYCLE ENVIRONMENTAL DATA¹
(Normalized to model LWR annual fuel requirement [WASH-1248] or reference reactor year [NUREG-0116])
(See footnotes at end of this table)

Environmental considerations	Total	Maximum effect per annual fuel requirement or reference reactor year of model 1,000 MWe LWR
NATURAL RESOURCE USE		
Land (acres):		
Temporarily committed ²	100	Equivalent to a 110 MWe coal-fired power plant.
Undisturbed area	79	
Disturbed area	22	
Permanently committed	13	
Overburden moved (millions of MT)	2.8	Equivalent to 95 MWe coal-fired power plant.
Water (millions of gallons):		
Discharged to air	160	=2 percent of model 1,000 MWe LWR with cooling tower.
Discharged to water bodies	11,090	
Discharged to ground	127	
Total	11,377	<4 percent of model 1,000 MWe LWR with once-through cooling.
Fossil fuel:		
Electrical energy (thousands of MW-hr)	323	<5 percent of model 1,000 MWe LWR output.
Equivalent coal (thousands of MT)	118	Equivalent to the consumption of a 45 MWe coal-fired power plant.
Natural gas (millions of acf)		
Effluents—CHEMICAL (MT)		
SO ₂ (including entrainment) ³	4,400	Equivalent to emissions from 45 MWe coal-fired plant for a year.
SO _x	1,130	
NO _x	14	
Hydrocarbons	29.6	
CO	1.154	
Particulates		

Nuclear Regulatory Commission

\$51.51

TABLE S-3—TABLE OF URANIUM FUEL CYCLE ENVIRONMENTAL DATA¹—Continued
(Normalized to model LWR annual fuel requirement [WASH-1248] or reference reactor year [NUREG-0116])
(See footnotes at end of this table)

Environmental considerations	Total	Maximum effect per annual fuel requirement or reference reactor year of model 1,000 MWe LWR
Other gases:		
F	.67	Principally from UFe production, enrichment, and reprocessing. Concentration within range of state standards—below level that has effects on human health.
Liquids:		
HCl	.014	
SO ₂	9.9	
NO _x	25.8	
Fluoride	12.9	
Ca ⁺⁺	5.4	
Cl ⁻	8.5	
Na ⁺	12.1	
NH ₃	10.0	
Fe	4	
Tailings solutions (thousands of MT)	240	From mills only—no significant effluents to environment.
Solids	91,000	Principally from mills—no significant effluents to environment.
Effluents—Radiological (curies)		
Gases (including entrainment):		
Rn-222	.02	Presently under reconsideration by the Commission.
Ra-226	.02	
Tl-230	.034	
Uranium	18.1	
Thorium (thousands)	24	
C-14	400	
K-85 (thousands)	.14	Principally from fuel reprocessing plants.
Ru-106	1.3	
I-129	.83	
Tc-99	.203	Presently under consideration by the Commission.
Fission products and transuramics		
Liquids:		
Uranium and daughters	2.1	Principally from milling—included tailings liquor and returned to ground—no effluents; therefore, no effect on environment.
Ra-226	.0034	From UFe production.
Tl-230	.0015	
Tl-234	.01	From fuel fabrication plants—concentration 10 percent of 10 CFR 20 for total processing 26 annual fuel requirements for model LWR.
Fission and activation products		
Solids (buried on site):		
Other than high level (shallow)	11,300	9,100 Ci comes from low level reactor wastes and 1,500 Ci comes from reactor decontamination and decommissioning—buried at land burial facilities. 600 Ci comes from mills—included in tailings returned to ground. Approximately 60 Ci comes from conversion and spent fuel storage. No significant effluent to the environment.
Buried at Federal Repository:		
Effluents—thermal (billions of British thermal units)	11,1×10 ¹⁰	Burned at Federal Repository.
Transportation (person-rem):	4,083	<5 percent of model 1,000 MWe LWR.
Occupational exposure (person-rem)	22.6	From reprocessing and waste management.

¹ In some cases where no entry appears it is clear from the background documents that the matter was addressed and that, in effect, the Table should be read as if a specific zero entry had been made. However, there are other areas that are not addressed at all in the Table. Table S-3 does not include health effects from the effluents described in the Table, or estimates of releases of Radon-222 from the uranium fuel cycle or estimates of releases of tritium-3 from waste management or reprocessing activities. These issues may be the subject of litigation in the individual licensing proceedings.

Data supporting this table are given in the "Environmental Survey of the Uranium Fuel Cycle," WASH-1248, April 1974; the "Environmental Survey of the Reprocessing and Waste Management Portion of the LWR Fuel Cycle," NUREG-0116 (Supp. 1 to WASH-1248); the "Public Comments and Task Force Responses Regarding the Environmental Survey of the Reprocessing and Waste Management Portion of the LWR Fuel Cycle," NUREG-0213 (Supp. 2 to WASH-1248); and in the record of the final licensing proceeding to Uranium Fuel Cycle impacts from spent fuel reprocessing and radioactive waste management. Documentation pertaining to Uranium Fuel Cycle impacts from spent fuel reprocessing and radioactive waste management, including the two fuel cycles (uranium only and no recycle). The contribution from transportation excludes transportation of cold fuel to a reactor and of irradiated fuel and radioactive wastes from a reactor which are considered in Table S-4 of §51.20(d). The contributions from the other steps of the fuel cycle are given in columns A-E of Table S-3A of WASH-1248.

² The contributions to temporarily committed land from reprocessing are not prorated over 30 years, since the complete land property interest is retained until the plant services one reactor for one year or 37 reactors for 30 years.

³ Estimated based upon construction of equivalent coal for power generation.

⁴ 1.2 percent from natural gas use and process.

[49 FR 9381, Mar. 12, 1984; 49 FR 10922, Mar. 23, 1984]

\$51.52 Environmental effects of transportation of fuel and waste—Table S-4.

Every environmental report prepared for the construction permit stage of a light-water-cooled nuclear power reactor, and submitted after February 4, 1975, shall contain a statement concerning transportation of fuel and radioactive wastes to and from the reactor. That statement shall indicate that the reactor and this transportation either meet all of the conditions in paragraph (a) of this section or all of the conditions in paragraph (b) of this section.

(a)(1) The reactor has a core thermal power level not exceeding 3,800 megawatts;

(2) The reactor fuel is in the form of sintered uranium dioxide pellets having a uranium-235 enrichment not exceeding 4% by weight, and the pellets are encapsulated in zircaloy rods;

(3) The average level of irradiation of the irradiated fuel from the reactor does not exceed 33,000 megawatt-days per metric ton, and no irradiated fuel assembly is shipped until at least 90 days after it is discharged from the reactor;

(4) With the exception of irradiated fuel, all radioactive waste shipped from

the reactor is packaged and in a solid form;

(5) Unirradiated fuel is shipped to the reactor by truck; irradiated fuel is shipped from the reactor by truck, rail, or barge; and radioactive waste other than irradiated fuel is shipped from the reactor by truck or rail; and

(6) The environmental impacts of transportation of fuel and waste to and from the reactor, with respect to normal conditions of transport and possible accidents in transport, are as set forth in Summary Table S-4 in paragraph (c) of this section; and the values in the table represent the contribution of the transportation to the environmental costs of licensing the reactor.

(b) For reactors not meeting the conditions of paragraph (a) of this section, the statement shall contain a full description and detailed analysis of the environmental effects of transportation of fuel and wastes to and from the reactor, including values for the environmental impact under normal conditions of transport and for the environmental risk from accidents in transport. The statement shall indicate that the values determined by the analysis represent the contribution of such effects to the environmental costs of licensing the reactor.

SUMMARY TABLE S-4—ENVIRONMENTAL IMPACT OF TRANSPORTATION OF FUEL AND WASTE TO AND FROM ONE LIGHT-WATER-COOLED NUCLEAR POWER REACTOR¹

Normal Conditions of Transport		Environmental Impact	
Heat (per irradiated fuel cask in transit)	250,000 Btu/hr.		
Weight (governed by Federal or State restrictions)	75,000 lbs. per truck; 100 tons per cask per rail car.		
Traffic density:			
Truck	Less than 1 per day.		
Rail	Less than 3 per month		
Exposed population		Estimated number of persons exposed	Cumulative dose to exposed population (per reactor year) ²
Transportation workers		200	0.01 to 300 millirem
General public:			
Onlookers	1,100	0.003 to 1.3 millirem	4 man-rem.
Along Route	650,000	0.0001 to 0.06 millirem	3 man-rem.

Radiological effects	Accidents in Transport	
	Small ¹	Environmental risk
Common (nonradiological) causes	1 fatal injury in 100 reactor years; 1 nonfatal injury in 10 reactor years; \$475 property damage per reactor year.	

¹ Data supporting this table are given in the Commission's "Environmental Survey of Transportation of Radioactive Materials to and from Nuclear Power Plants," WASH-1238, December 1972, and Supp. 1 NUREG-75/038 April 1975. Both documents are available for inspection and copying at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC and may be obtained from National Technical Information Service, Springfield, VA 22161. WASH-1238 is available from NTS at a cost of \$5.45 (microfiche, \$2.25) and NUREG-75/038 is available at a cost of \$3.25 (microfiche, \$2.25).

² The Federal Radiation Council has recommended that the radiation doses from all sources of radiation other than natural background and medical exposures should be limited to 5,000 millirem per year for individuals as a result of occupational exposure and should be limited to 500 millirem per year for individuals in the general population. The dose to individuals due to average natural background radiation is about 130 millirem per year.

³ A man-rem is an expression for the summation of whole body doses to individuals in a group. Thus, if each member of a population group of 1,000 people were to receive a dose of 0.001 rem (1 millirem), or if 2 people were to receive a dose of 0.5 rem (500 millirem) each, the total man-rem dose in each case would be 1 man-rem.

⁴ Although the environmental risk of radiological effects stemming from transportation accidents is currently incapable of being numerically quantified, the risk remains small regardless of whether it is being applied to a single reactor or a multireactor site.

[49 FR 9381, Mar. 12, 1984; 49 FR 10922, Mar. 23, 1984, as amended at 53 FR 43420, Oct. 27, 1988]

\$51.53 Postconstruction environmental reports.

(a) *General.* Any environmental report prepared under the provisions of this section may incorporate by reference any information contained in a prior environmental report or supplement thereto that relates to the production or utilization facility or information contained in a final environmental document previously prepared by the NRC staff that relates to the production or utilization facility. Documents that may be referenced include, but are not limited to, the final environmental impact statement, supplements to the final environmental impact statement, including supplements prepared at the license renewal stage; NRC staff-prepared final generic environmental impact statements; and environmental assessments and records of decisions prepared in connection with the construction permit, the operating license, and any license amendment for that facility.

(b) *Operating license stage.* Each applicant for a license to operate a production or utilization facility covered by §51.20 shall submit with its application the number of copies specified in §51.55 of a separate document entitled "Supplement to Applicant's Environmental Report—Operating License Stage," which will update "Applicant's Environmental Report—Construction Permit Stage." Unless otherwise required by the Commission, the applicant for an operating license for a nuclear power reactor shall submit this report

only in connection with the first licensing action authorizing full-power operation. In this report, the applicant shall discuss the same matters described in §§51.46, 51.51, and 51.52, but only to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit. No discussion of need for power, or of alternative energy sources, or of alternative sites for the facility, or of any aspect of the storage of spent fuel for the facility within the scope of the generic determination in §51.23(a) and in accordance with §51.23(b) is required in this report.

(c) *Operating license renewal stage.* (1) Each applicant for renewal of a license to operate a nuclear power plant under part 54 of this chapter shall submit with its application the number of copies specified in §51.55 of a separate document entitled "Applicant's Environmental Report—Operating License Renewal Stage."

(2) The report must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with §54.21 of this chapter. This report must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment. In addition, the applicant shall discuss in this report the environmental impacts of

alternatives and any other matters described in §51.45. The report is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. The environmental report need not discuss other issues not related to the environmental effects of the proposed action and the alternatives. In addition, the environmental report need not discuss any aspect of the storage of spent fuel for the facility within the scope of the generic determination in §51.23(a) and in accordance with §51.23(b).

(3) For those applicants seeking an initial renewal license and holding either an operating license or construction permit as of June 30, 1995, the environmental report shall include the information required in paragraph (c)(2) of this section subject to the following conditions and considerations:

(i) The environmental report for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part.

(ii) The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 issues in appendix B to subpart A of this part. The required analyses are as follows:

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws make-up water from a river whose annual flow rate is less than 3.15x10¹⁰ ft³/year (9x10⁹ m³/year), an assessment of the impact of the proposed action on the flow of the river and related impacts on instream and riparian ecological communities must be provided. The applicant shall also provide an assessment of the impacts of the withdrawal of water from the river on alluvial aquifers during low flow.

(B) If the applicant's plant utilizes once-through cooling or cooling pond heat dissipation systems, the applicant shall provide a copy of current Clear Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR part 155, or equivalent State permits and supporting documentation. If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock and impingement and entrainment.

(C) If the applicant's plant uses Ramney wells or pumps more than 10 gallons (total onsite) of ground water per minute, an assessment of the impact of the proposed action on ground water use must be provided.

(D) If the applicant's plant is located at an inland site and utilizes cooling ponds, an assessment of the impact of the proposed action on groundwater quality must be provided.

(E) All license renewal applicants shall assess the impact of refurbishment and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or endangered species in accordance with the Endangered Species Act.

(F) If the applicant's plant is located in or near a nonattainment or maintenance area, an assessment of vehicle exhaust emissions anticipated at the time of peak refurbishment work must be provided in accordance with the Clean Air Act as amended.

(G) If the applicant's plant uses a cooling pond, lake, or canal or discharges into a river having an annual average flow rate of less than 3.15x10¹⁰ ft³/year (9x10⁹ m³/year), an assessment of the impact of the proposed action on public health from thermophilic organisms in the affected water must be provided.

(H) If the applicant's transmission lines that were constructed for the specific purpose of connecting the plant to the transmission system do not meet the recommendations of the National Electric Safety Code for preventing electric shock from induced current, an assessment of the impact of the proposed action on the potential short

hazard from the transmission lines must be provided.

(I) An assessment of the impact of the proposed action on housing availability, land-use, and public schools (impacts from refurbishment activities only) within the vicinity of the plant must be provided. Additionally, the applicant shall provide an assessment of the impact of population increases attributable to the proposed project on the public water supply.

(J) All applicants shall assess the impact of highway traffic generated by the proposed project on the level of service of local highways during periods of license renewal refurbishment activities and during the term of the renewed license.

(K) All applicants shall assess whether any historic or archaeological properties will be affected by the proposed project.

(L) If the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided.

(M) [Reserved]

(iii) The report must contain a consideration of alternatives for reducing adverse impacts, as required by §51.45(c), for all Category 2 license renewal issues in appendix B to subpart A of this part. No such consideration is required for Category 1 issues in appendix B to subpart A of this part.

(iv) The environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.

(d) *Postoperating license stage.* Each applicant for a license amendment authorizing decommissioning activities either for unrestricted use or based on continuing use restrictions applicable to the site, and each applicant for a license amendment approving a license termination plan or decommissioning plan under §50.82 of this chapter either for unrestricted use or based on continuing use restrictions applicable to the site, and each applicant for a license or license amendment to store

spent fuel at a nuclear power reactor after expiration of the operating license for the nuclear power reactor shall submit with its application the number of copies, as specified in §51.55, of a separate document, entitled "Supplement to Applicant's Environmental Report—Post Operating License Stage," which will update "Applicant's Environmental Report—Operating License Stage," as appropriate, to reflect any new information or significant environmental change associated with the applicant's proposed decommissioning activities or with the applicant's proposed activities with respect to the planned storage of spent fuel.

Unless otherwise required by the Commission, in accordance with the generic determination in §51.23(a) and the provisions in §51.23(b), the applicant shall only address the environmental impact of spent fuel storage for the term of the license applied for. The "Supplement to Applicant's Environmental Report—Post Operating License Stage" may incorporate by reference any information contained in "Applicant's Environmental Report—Construction Permit Stage."

[61 FR 66548, Dec. 18, 1996, as amended at 64 FR 46806, Sept. 3, 1999]

§51.54 Environmental report—manufacturing license.

Each applicant for a license to manufacture a nuclear power reactor or, for an amendment to a license to manufacture seeking approval of the final design of the nuclear power reactor, pursuant to appendix M of part 52 of this chapter, shall submit with its application, as specified in §50.4, a separate document, entitled "Applicant's Environmental Report—Manufacturing License," or "Supplement to Applicant's Environmental Report—Manufacturing License." The environmental report shall address the environmental matters specified in appendix M of part 52 of this chapter, and shall contain the information specified in §51.45, as appropriate.

[61 FR 40811, Nov. 6, 1996, as amended at 64 FR 15398, Apr. 18, 1999]

\$51.55 Environmental report—number of copies; distribution.

(a) Each applicant for a license to construct and operate a production or utilization facility covered by paragraphs (b)(1), (b)(2), (b)(3), or (b)(4) of §51.20, each applicant for renewal of an operating license for a nuclear power plant, each applicant for a license amendment authorizing the decommissioning of a production or utilization facility covered by §51.20, and each applicant for a license or license amendment to store spent fuel at a nuclear power plant after expiration of the operating license for the nuclear power plant shall submit to the Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as appropriate, 41 copies of an environmental report or any supplement to an environmental report. The applicant shall retain an additional 109 copies of the environmental report or any supplement to the environmental report for distribution to parties and Boards in the NRC proceedings; Federal, State, and local officials; and any affected Indian tribes, in accordance with written instructions issued by the Director of the Office of Nuclear Reactor Regulation or the Director of the Office of Nuclear Material Safety and Safeguards, as appropriate.

(b) Each applicant for a license to manufacture a nuclear power reactor, or for an amendment to a license to manufacture seeking approval of the final design of the nuclear power reactor, pursuant to appendix M of part 52 of this chapter shall submit to the Commission an environmental report or any supplement to an environmental report in the manner specified in §50.4. The applicant shall retain an additional 109 copies of the environmental report or any supplement to the environmental report for distribution to parties and Boards in the NRC proceedings; Federal, State, and local officials and any affected Indian tribes, in accordance with written instructions issued by the Director of Nuclear Reactor Regulation.

[51 FR 40311, Nov. 6, 1986, as amended at 53 FR 24052, June 27, 1988; 54 FR 15398, Apr. 18, 1989; 61 FR 28488, June 5, 1996; 61 FR 66544, Dec. 18, 1996; 62 FR 68276, Nov. 3, 1997]

ENVIRONMENTAL REPORTS—MATERIALS LICENSES

\$51.60 Environmental report—materials licenses.

(a) Each applicant for a license or other form of permission, or an amendment to or renewal of a license or other form of permission issued pursuant to parts 30, 32, 33, 34, 35, 36, 39, 40, 61, 70 and/or 72 of this chapter, and covered by paragraphs (b)(1) through (b)(5) of this section, shall submit with its application to the Director of Nuclear Material Safety and Safeguards the number of copies, as specified in §51.66, of a separate document, entitled "Applicant's Environmental Report" or "Supplement to Applicant's Environmental Report," as appropriate. The "Applicant's Environmental Report" shall contain the information specified in §51.45. If the application is for an amendment to or a renewal of a license or other form of permission for which the applicant has previously submitted an environmental report, the supplement to applicant's environmental report may be limited to incorporating by reference, updating or supplementing the information previously submitted to reflect any significant environmental change, including any significant environmental change resulting from operational experience or a change in operations or proposed decommissioning activities. If the applicant is the U.S. Department of Energy, the environmental report may be in the form of either an environmental impact statement or an environmental assessment, as appropriate.

(b) As required by paragraph (a) of this section, each applicant shall prepare an environmental report for the following types of actions:

- (1) Issuance or renewal of a license or other form of permission for:
- (i) Possession and use of special nuclear material for processing and fuel fabrication, scrap recovery, or conversion of uranium hexafluoride pursuant to part 70 of this chapter.
- (ii) Possession and use of source material for uranium milling or production of uranium hexafluoride pursuant to part 40 of this chapter.
- (iii) Storage of spent fuel in an independent spent fuel storage installation

Nuclear Regulatory Commission

(ISFSI) or the storage of spent fuel or high-level radioactive waste in a monitored retrievable storage installation (MRS) pursuant to part 72 of this chapter.

(iv) Receipt and disposal of radioactive waste from other persons pursuant to part 61 of this chapter.

(v) Processing of source material for extraction of rare earth and other metals.

(vi) Use of radioactive tracers in field flood studies involving secondary and tertiary oil and gas recovery.

(vii) Construction and operation of a uranium enrichment facility.

(2) Issuance of an amendment that would authorize or result in (i) a significant expansion of a site, (ii) a significant change in the types of effluents, (iii) a significant increase in the amounts of effluents, (iv) a significant increase in individual or cumulative occupational radiation exposure, (v) a significant increase in the potential for or consequences from radiological accidents, or (vi) a significant increase in spent fuel storage capacity, in a license or other form of permission to conduct an activity listed in paragraph (b)(1) of this section.

(3) Amendment of a license to authorize the decommissioning of an independent spent fuel storage installation (ISFSI) or a monitored retrievable storage installation (MRS) pursuant to part 72 of this chapter.

(4) Issuance of a license amendment pursuant to part 61 of this chapter authorizing (i) closure of a land disposal site, (ii) transfer of the license to the disposal site owner for the purpose of institutional control, or (iii) termination of the license at the end of the institutional control period.

(5) Any other licensing action for which the Commission determines an Environmental Report is necessary.

[49 FR 9381, Mar. 12, 1984, as amended at 53 FR 31681, Aug. 19, 1988; 57 FR 18992, Apr. 30, 1992; 58 FR 7737, Feb. 9, 1993; 62 FR 26732, May 14, 1997]

\$51.61 Environmental report—independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS) license.

Each applicant for issuance of a license for storage of spent fuel in an independent spent fuel storage installation (ISFSI) or for the storage of spent fuel and high-level radioactive waste in a monitored retrievable storage installation (MRS) pursuant to part 72 of this chapter shall submit with its application to the Director of Nuclear Material Safety and Safeguards the number of copies, as specified in §51.66 of a separate document entitled "Applicant's Environmental Report—ISFSI License" or "Applicant's Environmental Report—MRS License," as appropriate. If the applicant is the U.S. Department of Energy, the environmental report may be in the form of either an environmental impact statement or an environmental assessment, as appropriate. The environmental report shall contain the information specified in §51.45 and shall address the siting evaluation factors contained in subpart E of part 72 of this chapter. Unless otherwise required by the Commission, in accordance with the generic determination in §51.23(a) and the provisions in §51.23(b), no discussion of the environmental impact of the storage of spent fuel at an ISFSI beyond the term of the license or amendment applied for is required in an environmental report submitted by an applicant for an initial license for storage of spent fuel in an ISFSI, or any amendment thereto.

[53 FR 31681, Aug. 19, 1988]

\$51.62 Environmental report—land disposal of radioactive waste licensed under 10 CFR part 61.

(a) Each applicant for issuance of a license for land disposal of radioactive waste pursuant to part 61 of this chapter shall submit with its application to the Director of Nuclear Material Safety and Safeguards the number of copies, as specified in §51.66 of a separate

document, entitled "Applicant's Environmental Report—License for Land Disposal of Radioactive Waste." The environmental report and any supplement to the environmental report may incorporate by reference information contained in the application or in any previous application, statement or report filed with the Commission provided that such references are clear and specific and that copies of the information so incorporated are available at the NRC Web site, <http://www.nrc.gov>, and/or at the NRC Public Document Room.

(b) The environmental report shall contain the information specified in §51.46, shall address the applicant's environmental monitoring program required by §§61.12(f), 61.53 and 61.59(b) of this chapter, and shall be as complete as possible in the light of information that is available at the time the environmental report is submitted.

(c) The applicant shall supplement the environmental report in a timely manner as necessary to permit the Commission to review, prior to issuance, amendment or renewal of a license, new information regarding the environmental impact of previously proposed activities, information regarding the environmental impact of any changes in previously proposed activities, or any significant new information regarding the environmental impact of closure activities and long-term performance of the disposal site.

§51.66 Environmental report—number of copies; distribution.

(a) Each applicant for a license or other form of permission, or an amendment to or renewal of a license or other form of permission issued pursuant to parts 30, 32, 33, 34, 35, 36, 39, 40, 61, 70 and/or 72 of this chapter, and covered by paragraphs (b) (1) through (6) of §51.60; or by §51.61 or §51.62 shall submit to the Director of Nuclear Material Safety and Safeguards an environmental report or any supplement to an environmental report in the number of copies specified. The applicant shall retain additional copies of the environmental report or any supplement to

the environmental report in the number of copies specified for distribution to Federal, State, and local officials and any affected Indian tribes in accordance with written instructions issued by the Director of Nuclear Material Safety and Safeguards.

(b)

ENVIRONMENTAL REPORT

Type of licensing action	Number of copies to be submitted with application	Number of copies to be retained by applicant for subsequent distribution
Licensing actions requiring environmental impact statements pursuant to §51.20(b).	25 copies	125 copies
Licensing actions requiring environmental assessments pursuant to §51.21.	15 copies	None

[49 FR 9381, Mar. 12, 1984, as amended at 52 FR 8241, Mar. 17, 1987, 58 FR 7737, Feb. 9, 1993]

§51.67 Environmental information concerning geologic repositories.

(a) In lieu of an environmental report, the Department of Energy, as an applicant for a license or license amendment pursuant to part 60 of this chapter, shall submit to the Commission any final environmental impact statement which the Department prepares in connection with any geologic repository developed under Subtitle A of Title I, or under Title IV, of the Nuclear Waste Policy Act of 1982, as amended. (See §60.22 of this chapter as to required time and manner of submission.) The statement shall include among the alternatives under consideration, denial of a license or construction authorization by the Commission.

(b) Under applicable provisions of law, the Department of Energy may be required to supplement its final environmental impact statement if it makes a substantial change in its proposed action that is relevant to environmental concerns or determines that there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. The Department shall submit any supplement to its final environmental impact

statement to the Commission. (See §60.22 of this chapter as to required time and manner of submission.)

(c) Whenever the Department of Energy submits a final environmental impact statement, or a final supplement to an environmental impact statement, to the Commission pursuant to this section, it shall also inform the Commission of the status of any civil action for judicial review initiated pursuant to section 119 of the Nuclear Waste Policy Act of 1982. This status report, which the Department shall update from time to time to reflect changes in status, shall:

(1) State whether the environmental impact statement has been found by the courts of the United States to be adequate or inadequate; and

(2) Identify any issues relating to the adequacy of the environmental impact statement that may remain subject to judicial review.

[34 FR 27870, July 3, 1969]

ENVIRONMENTAL REPORTS—RULEMAKING

§51.68 Environmental report—rulemaking.

Petitioners for rulemaking requesting amendments of parts 30, 31, 32, 33, 34, 35, 36, 39, 40 or part 70 of this chapter concerning the exemption from licensing and regulatory requirements of or authorizing general licenses for any equipment, device, commodity or other product containing byproduct material, source material or special nuclear material shall submit with the petition the number of copies, as specified in §51.69, of a separate document entitled "Petitioner's Environmental Report," which shall contain the information specified in §51.45.

[49 FR 9381, Mar. 12, 1984, as amended at 52 FR 8241, Mar. 17, 1987, 58 FR 7737, Feb. 9, 1993]

§51.69 Environmental report—number of copies.

Petitioners for rulemaking covered by §51.68 shall submit fifty (50) copies of an environmental report or any supplement to an environmental report.

**ENVIRONMENTAL IMPACT STATEMENTS
DRAFT ENVIRONMENTAL IMPACT
STATEMENTS—GENERAL REQUIREMENTS**

§51.70 Draft environmental impact statement—general.

(a) The NRC staff will prepare a draft environmental impact statement as soon as practicable after publication of the notice of intent to prepare an environmental impact statement and completion of the scoping process. To the fullest extent practicable, environmental impact statements will be prepared concurrently or integrated with environmental impact analyses and related surveys and studies required by other Federal law.

(b) The draft environmental impact statement will be concise, clear and analytic, will be written in plain language with appropriate graphics, will state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of NEPA and of any other relevant and applicable environmental laws and policies, will identify any methodologies used and sources relied upon, and will be supported by evidence that the necessary environmental analyses have been made. The format provided in section 1(a) of appendix A of this subpart should be used. The NRC staff will independently evaluate and be responsible for the reliability of all information used in the draft environmental impact statement.

(c) The Commission will cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements, in accordance with 40 CFR 1506.2 (b) and (c).

§51.71 Draft environmental impact statement—contents.

(a) Scope. The draft environmental impact statement will be prepared in accordance with the scope decided upon in the scoping process required by §§51.26 and 51.29. As appropriate and to the extent required by the scope, the draft statement will address the topics in paragraphs (b), (c), (d) and (e) of this section and the matters specified in

\$51.45, 51.50, 51.51, 51.52, 51.53, 51.54, 51.61 and 51.62.

(b) *Analysis of major points of view.* To the extent sufficient information is available, the draft environmental impact statement will include consideration of major points of view concerning the environmental impacts of the proposed action and the alternatives, and contain an analysis of significant problems and objections raised by other Federal, State, and local agencies, by any affected Indian tribes, and by other interested persons.

(c) *Status of compliance.* The draft environmental impact statement will list all Federal permits, licenses, approvals, and other entitlements which must be obtained in implementing the proposed action and will describe the status of compliance with those requirements. If it is uncertain whether a Federal permit, license, approval, or other entitlement is necessary, the draft environmental impact statement will so indicate.

(d) *Analysis.* The draft environmental impact statement will include a preliminary analysis that considers and weighs the environmental effects of the proposed action; the environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects. Except for supplemental environmental impact statements for the operating license renewal stage prepared pursuant to §51.96(c), draft environmental impact statements should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and considerations of Federal policy, including factors not related to environmental quality if applicable, are relevant to the consideration of environmental effects of the proposed action identified pursuant to paragraph (a) of this section. Supplemental environmental impact statements prepared at the license renewal stage pursuant to §51.96(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative

in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal stage need not discuss other issues not related to the environmental effects of the proposed action and associated alternatives. The draft supplemental environmental impact statement for license renewal prepared pursuant to §51.96(c) will rely on conclusions as amplified by the supporting information in the GEIS for issues designated as Category 1 in appendix B to subpart A of this part. The draft supplemental environmental impact statement must contain an analysis of those issues identified as Category 2 in appendix B to subpart A of this part that are open for the proposed action. The analysis for all draft environmental impact statements will, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms. Due consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable zoning and land-use regulations and water pollution limitations or requirements promulgated or imposed pursuant to the Federal Water Pollution Control Act. The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by such standards and requirements irrespective of whether a certification or license from the appropriate authority has been obtained.³ While

³Compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act (imposed by EPA or designated permitting states) is not a substitute for and does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality and to consider alternatives to the proposed

satisfaction of Commission standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the analysis will, for the purposes of NEPA, consider the radiological effects of the proposed action and alternatives.

(e) *Preliminary recommendation.* The draft environmental impact statement normally will include a preliminary recommendation by the NRC staff respecting the proposed action. This preliminary recommendation will be based on the information and analysis described in paragraphs (a) through (d) of this section and §§51.75, 51.76, 51.80, 51.85, and 51.95, as appropriate, and will be reached after considering the environmental effects of the proposed action and reasonable alternatives⁴ and, except for supplemental environmental

action that are available for reducing adverse effects. Where an environmental assessment of aquatic impact from plant discharges is available from the permitting authority, the NRC will consider the assessment in its determination of the magnitude of environmental impacts for striking an overall cost-benefit balance at the construction permit and operating license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage. When no such assessment of aquatic impacts is available from the permitting authority, NRC will establish on its own or in conjunction with the permitting authority and other agencies having relevant expertise the magnitude of potential impact for striking an overall cost-benefit balance for the facility at the construction permit and operating license stages, and in its determination of whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable at the license renewal stage.

The consideration of reasonable alternatives to a proposed action involving nuclear power reactors (e.g., alternative energy sources) is intended to assist the NRC in meeting its NEPA obligations and does not preclude any State authority from making separate determinations with respect to these alternatives and in no way preempts, displaces, or affects the authority of States or other Federal agencies to address these issues.

impact statements for the operating license renewal stage prepared pursuant to §51.95(c), after weighing the costs and benefits of the proposed action. In lieu of a recommendation, the NRC staff may indicate in the draft statement that two or more alternatives remain under consideration.

[49 FR 9381, Mar. 12, 1984, as amended at 61 FR 29488, June 5, 1996; 61 FR 6534, Dec. 18, 1996]

\$51.72 Supplement to draft environmental impact statement.

(a) The NRC staff will prepare a supplement to a draft environmental impact statement for which a notice of availability has been published in the FEDERAL REGISTER as provided in §51.117, if:

(1) There are substantial changes in the proposed action that are relevant to environmental concerns; or

(2) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

(b) The NRC staff may prepare a supplement to a draft environmental impact statement when, in its opinion, preparation of a supplement will further the purposes of NEPA.

(c) The supplement to a draft environmental impact statement will be prepared and noticed in the same manner as the draft environmental impact statement except that a scoping process need not be used.

\$51.73 Request for comments on draft environmental impact statement.

Each draft environmental impact statement and each supplement to a draft environmental impact statement distributed in accordance with §51.74, and each news release provided pursuant to §51.74(d) will be accompanied by or include a request for comments on the proposed action and on the draft environmental impact statement or any supplement to the draft environmental impact statement and will state where comments should be submitted and the date on which the comment period closes. A minimum comment period of 45 days will be provided. The comment period will be calculated